

CHAPTER III

RESEARCH METHOD

This chapter consists of research design, population and sample, data collection, and data analysis.

3.1 Research Design

In this study, the researcher chooses to do an experimental research in English class. Quantitative is used as an approach in this study. Cresswell (2014, p. 40) said, “Quantitative research is an approach for testing objectives theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures”. It is using quantitative approach because quantitative is concerned with collecting and analyzing data that is structured and can be represented numerically. One of the central goals is to build accurate and reliable measurements that allow for statistical analysis and the focus of quantitative is on data that can be measured.

The researcher uses pre-experimental design or in another name is one-group-pretest-posttest design. The use of this design in this study is because the researcher wants to gauge the effect of storytelling technique toward students’ speaking interest. According to Adnan (2016), pre-experimental research is a study which gives a pre-test before the treatment and post-test after the treatment in order to know there is or not the effect of the variable studied by comparing the average score of the pretest and the posttest. Based on Ary et al. (2014), the one-group pretest-posttest design usually involves three steps: (1) administering a

pretest measuring the dependent variable; (2) applying the experimental treatment X to the subjects; (3) administering a posttest, again measuring the dependent variable. The pretest and posttest are the same forms of the test but administered in different times. Differences attributed to application of the experimental treatment are then evaluated by comparing the pretest and posttest scores. In this study researcher just put one group and uses pretest and posttest to see the result of the treatments.

O₁	X	O₂
Pretest	Treatment	Posttest

The procedure of One Group Pretest-Posttest design:

1. Administering a pretest with a purpose measuring students' interest on speaking of Basic Two students' of Palapa English College Sumenep.
2. Applying the experimental treatment by using storytelling technique to the Basic Two students' of Palapa English College Sumenep.
3. Administering a posttest with purpose measuring students' interest on speaking of Basic Two students' of Palapa English College Sumenep.

3.2 Population and Sample

3.2.1 Population

As stated by Hanlon, et. al. (2011), "Population is all the individuals or units of interest; typically, there is not available data for almost all individuals in a population". According to Garson (2012, p. 5), "The population, also called the universe, is the set of people or entities to which findings are to be generalized.

The population must be defined explicitly before a sample is taken.” Lammer (2004) said the term population means all members that meet a set of specifications or a specified criterion. The population in this study is entire of Basic Two students’ of Palapa English College Sumenep. The Basic Two class of Palapa English College Sumenep consists of four (5) classes which divided based on the day and time they choose to learn, the total number of population is 75.

3.2.2 Sample

Fridah (2002, p.1) stated, “Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population. The purpose of sampling is to draw conclusions about populations from samples by using inferential statistics which enables us to determine a population’s characteristics by directly observing only a portion (or sample) of the population.”

Generally, according to Garson (2012) sampling is divided into two major sampling, the first is non-probability sampling and the second is probability sampling. Non-probability sampling is widely used as a case selection method in qualitative research, or for quantitative studies of an exploratory nature where random sampling is too costly, or where it is the only feasible alternative. Non-probability sampling consists of convenience sampling, quota sampling and expert sampling. While, probability sampling consists of simple random sampling, equal probability systematic sampling, stratified simple random sampling, and clustering and multilevel effects in multistage samples.

In this case, the researcher uses probability sampling. Systematic sampling is selected by the researcher as a technique to do in this study. According Sugiyono (2001), “Systematic sampling is a technique of determining the sample based on the sequence of members of the population who have been given the serial number.”

Researchers use this technique on the basis of internal ease obtaining samples. As stated by Hanlon, et. al. (2011), “Sample is a subset of the individuals in a population; there is typically data available for individuals in samples”. The limitation of time, energy and accessibility makes the researcher unable to take the data and information from all of the population, therefore the researcher takes smaller one called sample that can be reflect the whole population. According to Lammers (2004), “Sample is some elements are selected from a population”. So in this case all class are numbered, number 1 to number 5. Sampling can be done with odd number only. At the end the samples taken consist of 35 students from Basic Two class as the experimental group.

3.3 Data Collection

In this research, researcher use quantitative which is used for the pre-test and post-test report.

3.3.1 Technique and Instrument

The data were collected by using some techniques, each of technique will be summarized as follows:

1. Questionnaire, a research instrument consisting of a series of questions for the purpose of gathering information from respondents. The

questionnaire is related to the student's speaking interest. It is adopted from internet and it has 3 indicators, are: attention, curiosity, enjoyment. It used the Likert scale which is contains 5 alternatives answer as in the table below:

Table of Likert Scale Code

Code	Information
SS	Storngly Angree
S	Angree
N	In Doubt
TS	Disagree
STS	Strongly Disagree

Table of Likert Score Scale Category

Statement	Score				
	SS	S	N	TS	STS
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Table of Specification of Instrument

No	Indicator	Total and Item Number	
		Positive	Negative
1	Enjoyment	12 (1,3,12,14,15,35,37,38,39,42,43,45)	4 (4,11,18,31)

2	Attention	13 (5,6,7,8,9,13,21,24,26, 27 ,32,33,44)	6 (16,28,29,30,34,40)
3	Curiosity	7 (2,10,17,19,20,23,41)	3 (22,25,36)
TOTAL		45	

2. Test, the purpose of this technique, the researchers used to determine the results from before and after the storytelling technique that used to the students' speaking interest on speaking. Pre-test, a test that is done before it is an action/stimulus. The pretest was used in this case are asking the students to introduce themselves further by telling about their vacation one by one in turn and giving . While the post-test is a test performed after being given an action/stimulus. The posttest is asking the students to re-telling a story about Jack and The Beanstalk by using their own word one by one in turn. The second test will show the results of data before and after the treatment/action/stimulus that has been given to the students, so that later researchers can conclude whether there was an increase or no to what is being studied.

In collecting data, researcher used several instruments. Each of instruments will be attached and summarized as follows:

1. Questionnaire sheets

It is used to get the information related to students' interest during the teaching and learning process, where researchers observed

circumstances, habits, interaction between teachers and students, as well as the activities carried out in the classroom.

2. The test sheets/report

It is used to show the scores of the students in that English class.

Researchers will look for the average value, comparison, and then conclude it.

3.3.2 Procedure

The procedure of this research to collect the data can be summarized as follows:

First, the time, this research will be conducted within 3 weeks at Palapa English College Sumenep. There are six (6) meetings that will be experimented by the examiner to take the required data briefly, two meeting for the pretest and two meeting for the posttest, the rest of which is 2 times for experimental treatment meeting. Furthermore, the college has its own learning system therefore researchers conduct this experimental research at least six (6) meetings or if the data needed is still less then will be added with 2 meetings.

Second, the data collection, there are several ways to get the data needed in this experimental study: Preparation (the researcher chooses the place of the study that is appropriate to the research problem, the researcher provide information to agencies associated with this research, the researcher makes instrument try out, the researcher analyzes try out, the researcher conveys the intent and purpose of this study, the researcher ask for help as

data retrieval); Implementation (the researcher confirmed the data required, the researcher gives the treatment about storytelling technique until two meetings); Conclusion (the researcher gives the test to the students, the researcher calculates and puts the result of the test to the table, the researcher begins to draw conclusion from the data that has been collected).

3.4 Data Analysis

The data that already obtained by the researchers in this study should be analyzed. According to Willian (2013), “Data analysis is applying a series of statistical test and procedures in a specific stepwise progression in order to examine a dataset. In other words, data analysis is taking a set of tools (statistical test/ procedures) that when applied in a certain order reveal the message(s), lesson(s), and answer(s) the data to tell”. Cresswell (2012) state the 5 steps in the process of quantitative data collection, are: selecting participant, obtaining permission, selecting the types of data, identifying the instruments, and administering the data collection. Data analysis will be performed using computer program statistics software, namely *IBM SPSS Version 22*.